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10/749,525	12/31/2003	Richard T. Gregory	200208692-1	8830

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EXAMINER
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KASSA, HILINA S

ART UNIT	PAPER NUMBER
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2625

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08/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/749,525

Applicant(s)

GREGORY, RICHARD T.

Examiner

Hilina S. Kassa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-11, 15-25 and 28-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Berry et al. (US Patent Number 7,099,027 B1).

#### **(1) regarding claim 1:**

As shown in figures 1a-1b, Berry et al. disclose a method for distributed processing of print jobs using multiple printer processors and centralized printing (118, 164, figure 1b), comprising the steps of:

dividing a print job into a plurality of print job segments in a print distribution module (column 4, lines 24-30; note that print job gets divided into multiple portions);

transmitting the plurality of print job segments to one or more distribution responsive printers (column 4, lines 31-38; note that the segmented print jobs get sent to the selected RIP engine i.e. PRINT1, figure 1b);

processing the plurality of print job segments using the one or more distribution responsive printers (column 4, line 65-column 5, line 4; note that the segmented print job gets processed);

receiving the plurality of print job segments from the one or more distribution responsive printers at the print distribution module (column 5, lines 4-10; note that the segmented job gets provided by the distributor to the RIP engine i.e. PRINT1, figure 1b); and

printing the plurality of print job segments at a target printer when the plurality of segments is received from the print distribution module (column 5, lines 14-18; note that the outputs of the RIP engines or PRINT1-n of figure 1b gets outputted or printed in along path 164 of figure 1b).

**(2) regarding claim 2:**

Berry et al. further disclose, a method as in claim 1, further comprising the step of sending the print job from a digital device to the print distribution module (column 21, lines 41-45; note that the printer is connected to the computer).

**(3) regarding claim 3:**

Berry et al. further disclose, a method as in claim 2, wherein the step of sending the print job from a digital device to a print distribution module further comprises the step of sending the print job from the digital device to the print distribution module

through a wired connection (column 21, lines 50-55; note that the print job could be distributed by wired connection).

**(4) regarding claim 4:**

Berry et al. further disclose, a method as in claim 2, wherein the step of sending the print job from a digital device to the print distribution module further comprises the step of sending the print job from the digital device to the print distribution module through a wireless connection (column 21, lines 50-55; note that the print job could be distributed by wireless connection).

**(5) regarding claim 5:**

Berry et al. further disclose, a method as in claim 2, wherein the step of sending the print job further comprises the step of sending the print job from a digital device to a print distribution module through a computer network (column 21, lines 41-47; note that the printer is connected to the computer via a network).

**(6) regarding claim 6:**

Berry et al. further disclose, a method, as in claim 1, further comprising the step of configuring firmware of the one or more distribution responsive printers to receive print job segments in a variety of common print languages (column 3, lines 17-21, lines 25-30; note that the language processor 120 of figure 1a is configured to recognize the specified document's parameter).

**(7) regarding claim 7:**

Berry et al. further disclose, a method as in claim 1, wherein the step of dividing the print job further comprises the step of dividing the print job into print job segments that are a single printed page (column 7, lines 8-16; note that the portion of the print job occupies among the total of pages and each page gets processed separately).

**(8) regarding claim 8:**

Berry et al. further disclose, a method as in claim 1, wherein the step of transmitting the plurality of print job segments further involves the step of transmitting a first print job segment of the plurality of print job segments to a target printer to be printed and transmitting remaining print job segments to the one or more distribution responsive printers (column 27, line 66-column 28, line 9; note that the job distributor sends the print file to one of the plurality of the print devices).

**(9) regarding claim 9:**

Berry et al. further disclose, a method as in claim 1, wherein the step of processing the plurality of print job segments further comprises the step of processing the plurality of print job segments using two or more distribution responsive printers (column 5, lines 36-4), said plurality of print job segments being processed into print engine-ready data (column 5, lines 41-49; column 9, lines 49-54; note that the segments are processed into PDL).

**(10) regarding claim 10:**

Berry et al. further disclose, a method as in claim 1, wherein the step of receiving the plurality of print job segments further involves the step of sending the plurality of print job segments from the print distribution module to the target printer (column 5, lines 14-20; lines 36-41; note that the plurality of processed jobs get combined at the output to complete the print job).

**(11) regarding claim 11:**

Berry et al. further disclose, a method as in claim 1, further comprising the step of determining which types of distribution responsive printer connected to the network will be used for processing the print job (column 21, lines 50-55).

**(12) regarding claim 15:**

Berry et al. further disclose, a method as in claim 1, wherein the step of receiving the plurality of print job segments further comprises the step of receiving the plurality of print job segments from the distribution responsive printers by querying the one or more distribution responsive printers with the print distribution module (column 28, lines 37-47).

**(13) regarding claim 16:**

Berry et al. further disclose, a method as in claim 1 wherein the step of receiving the plurality of print job segments further comprises the step of transmitting the plurality of print job segments from the distribution responsive printers to the print distribution module (column 10, lines 30-44).

**(14) regarding claim 17:**

Berry et al. further disclose, a method as in claim 16, wherein the step of transmitting the plurality of print job segments is performed immediately after an individual print job segment from the plurality of print job segments has completed processing (column 13-21; note that each segment gets processed according to the numerical label).

**(15) regarding claim 18:**

Berry et al. further disclose, a printing system to distribute processing of print jobs using multiple printer processors and centralized printing (118, 164, figure 1b), comprising:

a print distribution module configured to divide a print job into a plurality of print job segments (column 4, lines 24-30; note that print job gets divided into multiple portions);

a distribution responsive printer configured to receive and process one or more of the plurality of print job segments from the print distribution module (column 4, line 65-column 5, line 4; note that the segmented print job gets processed); and



wherein the print distribution module is further configured to receive one or more print job segments from the distribution responsive printer after processing (column 5, lines 14-18; note that the outputs of the RIP engines or PRINT1-n of figure 1b gets outputted or printed in along path 164 of figure 1b).

**(16) regarding claim 19:**

Berry et al. further disclose, a system as in claim 18, wherein the print distribution module is configured to transmit a first print job segment of the plurality of print job segments to a target printer to be printed (column 27, line 67-column 28, line 3).

**(17) regarding claim 20:**

Berry et al. further disclose, a system as in claim 19, wherein the print distribution module is configured to transmit a remainder of the print job segments to one or more distribution responsive printers (column 28, lines 12-16).

**(18) regarding claim 21:**

Berry et al. further disclose, a system as in claim 20, wherein the target printer is a distribution responsive printer (column 28, lines 6-12).

**(19) regarding claim 22:**

Berry et al. further disclose, a system as in claim 18, wherein the print distribution module is configured to divide and transmit a remainder of the print job segments

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between one or more distribution responsive printers and the target printer (column 27, line 66-column 28, line 16).

**(20) regarding claim 23:**

Berry et al. further disclose, a system as in claim 18, wherein the printing system further comprises a computer network (column 21, lines 41-47; note that the printer is connected to the computer via a network).

**(21) regarding claim 24:**

Berry et al. further disclose, a system as in claim 23, wherein a digital device is connected to the network to send a print job (column 21, lines 41-45; note that the printer is connected to the computer).

**(22) regarding claim 25:**

Berry et al. further disclose, a system as in claim 24, wherein the digital device is configured to transmit a print job to the print distribution module (column 21, lines 50-55).

**(23) regarding claim 28:**

Berry et al. further disclose, a system as in claim 20, wherein the print distribution module is configured to query one or more distribution responsive printers to which a remainder of the print job segments have been sent (column 27, line 66-column 28, line

3), and receive the remainder of the print job segments when one or more distribution responsive printers have completed processing the remainder of the print job segments (column 28, lines 12-16).

**(24) regarding claim 29:**

Berry et al. further disclose, a system as in claim 28, wherein the print distribution module is configured to receive processed data from processing of a remainder of the print job segments at the distribution responsive printers as soon as the processed data is available (column 28, lines 12-16; note that the distributor makes the decision in the presence of segments of print job).

**(25) regarding claim 30:**

Berry et al. further disclose, a printing system to distribute processing of print jobs using multiple printer processors and centralized printing (118, 164, figure 1b), comprising:

a print distribution means for dividing a print job into a plurality of print job segments (column 4, lines 24-30; note that print job gets divided into multiple portions);

a distribution responsive printer means for receiving and processing one or more of the plurality of print job segments from the print distribution means (column 4, line 65-column 5, line 4; note that the segmented print job gets processed);

wherein the print distribution means is further configured to receive one or more print job segments from the distribution responsive printer after processing (column 5,

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lines 4-10; note that the segmented job gets provided by the distributor to the RIP engine i.e. PRINT1, figure 1b); and

a target printer means for receiving the one or more print job segments from the print distribution means and for printing the one or more print job segments (column 5, lines 14-18; note that the outputs of the RIP engines or PRINT1-n of figure 1b gets outputted or printed in along path 164 of figure 1b).

**(26) regarding claim 31:**

Berry et al. further disclose, an article of manufacture, comprising:

a computer usable medium having computer readable program code embodied therein for distributed processing of print jobs using multiple printer processors and centralized printing (118, 164, figure 1b), the computer readable program code in the article of manufacture comprising:

computer readable program code for dividing a print job into a plurality of print job segments in a print distribution module (column 4, lines 24-30; note that print job gets divided into multiple portions);

computer readable program code for transmitting the plurality of print job segments to one or more distribution responsive printers (column 4, lines 31-38; note that the segmented print jobs get sent to the selected RIP engine i.e. PRINT1, figure 1b);

computer readable program code for processing the plurality of print job segments using the one or more distribution responsive printers (column 4, line 65-column 5, line 4; note that the segmented print job gets processed);

computer readable program code for receiving the plurality of print job segments from the one or more distribution responsive printers at the print distribution module; and

computer readable program code for printing the plurality of print job segments at a target printer when the plurality of segments is received from the print distribution module (column 5, lines 14-18; note that the outputs of the RIP engines or PRINT1-n of figure 1b gets outputted or printed in along path 164 of figure 1b).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12-14 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berry et al. (US Patent Number 7,099,027 B1) as applied to claims 1 and 18 above, and further in view of Shima (US Publication Number 2004/0158654 A1).

**(1) regarding claim 12:**

Berry et al. disclose all of the subject matter as described as above except for specifically teaching the step of determining an operational state of each of the two or more distribution responsive printers that are connected to a network.

However, Shima teaches a step of determining an operational state of each of the two or more distribution responsive printers that are connected to a network (paragraph [0079], lines 1-8; note that the distribution printers are connected to a network; also, in DISP, of figure 2 shows the state of the printer as being ON).

Berry et al. and Shima are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a state determination means. The suggestion/motivation for doing so would have been to in order to specify the appropriate distributing printer state (paragraph [0035], lines 4-10). Therefore, it would have been to combine Berry et al. and Shima to obtain the invention as specified in claim 12.

**(2) regarding claim 13:**

Berry et al. disclose all of the subject matter as described as above except for specifically teaching wherein the step of transmitting the plurality of print job segments to one or more distribution responsive printers, further comprises the step of transmitting the plurality of print job segments to one or more distribution responsive printers that are determined to be a similar model as the target printer.

However, Shima teaches a step of transmitting the plurality of print job segments to one or more distribution responsive printers, further comprises the step of

transmitting the plurality of print job segments to one or more distribution responsive printers that are determined to be a similar model as the target printer (paragraph [0014], lines 1-11; note that the model of the printing device gets retrieved in order to match the identical model).

Berry et al. and Shima are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to transmit the plurality of print job segments to one or more distribution responsive printers that are determined to be a similar model as the target printer. The suggestion/motivation for doing so would have been in order to assure the uniform quality of the printing device (paragraph [0014], lines 12-16). Therefore, it would have been to combine Berry et al. and Shima to obtain the invention as specified in claim 13.

**(3) regarding claim 14:**

Berry et al. disclose all of the subject matter as described as above except for specifically teaching the step of transmitting the plurality of print job segments to one or more distribution responsive printers that are determined to be available by the print distribution module.

However, Shima teaches step of transmitting the plurality of print job segments to one or more distribution responsive printers that are determined to be available by the print distribution module (paragraph [0082], lines 1-8; note that the distribution printers

are connected to a network; also, in DISP, of figure 2 shows the state of the printer as being ON).

Berry et al. and Shima are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to determine the availability of transmitting the plurality of print job segments to one or more distribution responsive printers. The suggestion/motivation for doing so would have been to in order to specify the appropriate distributing printer state (paragraph [0035], lines 4-10). Therefore, it would have been to combine Berry et al. and Shima to obtain the invention as specified in claim 14.

**(4) regarding claim 26:**

Berry et al. disclose all of the subject matter as described as above except for specifically teaching, wherein the print distribution module is configured to determine the model and status of each distribution responsive printer connected to a network.

However, Shima teaches wherein the print distribution module is configured to determine the model and status of each distribution responsive printer connected to a network (paragraph [0014], lines 1-11; note that the model of the printing device gets retrieved in order to match the identical model; paragraph [0082], lines 1-8; note that the distribution printers are connected to a network; also, in DISP, of figure 2 shows the state of the printer as being ON).



Berry et al. and Shima are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art wherein the print distribution module is configured to determine the model and status of each distribution responsive printer connected to a network. The suggestion/motivation for doing so would have been in order to assure the uniform quality of the printing device and to determine the availability state (paragraph [0014], lines 12-16). Therefore, it would have been to combine Berry et al. and Shima to obtain the invention as specified in claim 26.

**(5) regarding claim 27:**

Berry et al. disclose all of the subject matter as described as above except for specifically teaching, wherein the print distribution module is configured to transmit a remainder of the print job segments to one or more distribution responsive printers when the print distribution module has determined the one or more distribution responsive printers are not busy.

However, Shima teaches wherein the print distribution module is configured to transmit a remainder of the print job segments to one or more distribution responsive printers when the print distribution module has determined the one or more distribution responsive printers are not busy (s32, s33, figure 5; paragraph [0104], lines 1-10; note that the print specification determines the availability state).

Berry et al. and Shima are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of

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ordinary skill in the art wherein the print distribution module is configured to transmit a remainder of the print job segments to one or more distribution responsive printers when the print distribution module has determined the one or more distribution responsive printers are not busy. The suggestion/motivation for doing so would have been in order efficiently process the print jobs and to assure the uniform quality of the printing device (paragraph [0014], lines 12-16). Therefore, it would have been to combine Berry et al. and Shima to obtain the invention as specified in claim 27.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Gassho et al. (US Patent Number 7,180,626 B1) discloses a technique of the present invention enables quick completion of printing operations even when a large number of print jobs are concentrated on one printer.

6. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Hilina Kassa whose telephone number is (571) 270-1676.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Lamb could be reached at (571) 272- 7406.

**Any response to this action should be mailed to:**

Commissioner of Patent and Trademarks

Washington, D.C. 20231

**Or faxed to:**


**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Hilina Kassa

August 20, 2007



TWYLER LAMB  
SUPERVISORY PATENT EXAMINER